



Complete Summary

TITLE

Cardiac rehabilitation: percentage of patients in the healthcare system's cardiac rehabilitation program(s) who meet the specified performance measure criteria for diabetes mellitus or impaired fasting glucose.

SOURCE(S)

Thomas RJ, King M, Lui K, Oldridge N, Pina IL, Spertus J, ACC/AHA Task Force Members. AACVPR/ACC/AHA 2007 performance measures on cardiac rehabilitation for referral to and delivery of cardiac rehabilitation/secondary prevention services. J Cardiopulm Rehabil Prev 2007 Sep-Oct;27(5):260-90. [74 references] [PubMed](#)

Thomas RJ, King M, Lui K, Oldridge N, Pina IL, Spertus J, American Association of Cardiovascular and Pulmonary Rehabilitation/American. AACVPR/ACC/AHA 2007 performance measures on cardiac rehabilitation for referral to and delivery of cardiac rehabilitation/secondary prevention services. Circulation 2007 Oct 2;116(14):1611-42. [74 references] [PubMed](#)

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Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of patients in the health care system's cardiac rehabilitation program(s) who meet the specified performance measure criteria for diabetes mellitus or impaired fasting glucose.

This performance measure is one of ten individual submeasures of the measure subset, [Individualized Patient Assessment and Evaluation of Modifiable Cardiovascular Risk Factors, Development of Individual Interventions, and Communication with Other Healthcare Providers](#).

RATIONALE

The presence of diabetes mellitus (DM) or impaired fasting glucose (IFG) has been linked to unfavorable long-term cardiovascular outcomes. Because improved glycemic control has been shown to favorably affect cardiovascular morbidity and mortality, the cardiac rehabilitation (CR) program setting is an ideal environment to educate patients about the implications of DM or IFG and to initiate the behavior patterns that foster improved glycemic control.

PRIMARY CLINICAL COMPONENT

Cardiac rehabilitation program; diabetes mellitus; impaired fasting glucose (IFG); assessment and intervention

DENOMINATOR DESCRIPTION

Number of patients in the healthcare system's cardiac rehabilitation (CR) program(s)

NUMERATOR DESCRIPTION

Number of patients in the healthcare system's cardiac rehabilitation (CR) program(s) who meet the performance measure for diabetes mellitus/impaired fasting glucose (DM/IFG) (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A systematic review of the clinical literature
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [AHA/ACC guidelines for secondary prevention for patients with coronary and other atherosclerotic vascular disease: 2006 update.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance

EVIDENCE SUPPORTING NEED FOR THE MEASURE

Lavie CJ, Milani RV. Cardiac rehabilitation and exercise training programs in metabolic syndrome and diabetes. J Cardiopulm Rehabil 2005 Mar-Apr;25(2):59-66. [67 references] [PubMed](#)

Soja AM, Zwisler AD, Frederiksen M, Melchior T, Hommel E, Torp-Pedersen C, Madsen M. Use of intensified . Am Heart J 2007 Apr;153(4):621-8. [PubMed](#)

State of Use of the Measure

STATE OF USE

Pilot testing

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Home Care
Hospitals
Physician Group Practices/Clinics
Rehabilitation Centers

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses
Nurses
Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Unspecified

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better
Staying Healthy

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Patients in the healthcare system's cardiac rehabilitation (CR) program(s)

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Number of patients in the healthcare system's cardiac rehabilitation (CR) program(s)

Exclusions

Unspecified

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Number of patients in the healthcare system's cardiac rehabilitation (CR) program(s) who meet the performance measure* for diabetes mellitus/impaired fasting glucose (DM/IFG)

*For each eligible patient enrolled in the CR program, there is documentation that the following criteria have been met:

1. Assessment of the diagnosis of impaired fasting glucose (IFG) and diabetes mellitus (DM), with definitions as described in the most recent American Diabetes Association (ADA) Standards of Medical Care in Diabetes Position Statement (2006).
2. If the patient has a diagnosis of IFG or DM, then an intervention plan is recommended to the patient for glycemic monitoring during exercise, for glycemic goals, and for recommendations concerning medical nutrition therapy (MNT) and/or skill training sessions (if not previously attended).
3. Prior to completion of the CR program, DM/IFG status and the DM/IFG intervention plan are reassessed and communicated to the patient as well as to the primary care provider and/or cardiologist.

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Episode of care

DATA SOURCE

Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

The Cardiac Rehabilitation/Secondary Prevention Performance Measure Writing Committee initially identified 39 factors from various practice guidelines and other reports that were considered potential performance measures for the Cardiac Rehabilitation/Secondary Prevention Performance Measurement Sets (see Table 1

of the original measure documentation for standard guidelines that were used to rate the classification of recommendations and level of evidence for assessing these factors). The group evaluated these factors according to guidelines established by the American College of Cardiology/American Heart Association (ACC/AHA) Task Force on Performance Measures. Those measures that were deemed to be most evidence-based, interpretable, actionable, clinically meaningful, valid, reliable, and feasible were included in the final performance measurement sets. Once these measures were identified, the writing committee then discussed and refined, over a series of months, the definition, content, and other details of each of the selected measures.

EVIDENCE FOR RELIABILITY/VALIDITY TESTING

Thomas RJ, King M, Lui K, Oldridge N, Pina IL, Spertus J, ACC/AHA Task Force Members. AACVPR/ACC/AHA 2007 performance measures on cardiac rehabilitation for referral to and delivery of cardiac rehabilitation/secondary prevention services. J Cardiopulm Rehabil Prev 2007 Sep-Oct;27(5):260-90. [74 references] [PubMed](#)

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Identifying Information

ORIGINAL TITLE

Performance measure B-3F: individualized assessment of the diagnosis of diabetes mellitus or impaired fasting glucose.

MEASURE COLLECTION

[Cardiac Rehabilitation/Secondary Prevention Performance Measurement Sets](#)

MEASURE SET NAME

[Cardiac Rehabilitation/Secondary Prevention Performance Measurement Set B](#)

MEASURE SUBSET NAME

[Individualized Patient Assessment and Evaluation of Modifiable Cardiovascular Risk Factors, Development of Individual Interventions, and Communication with Other Healthcare Providers](#)

DEVELOPER

American Association of Cardiovascular and Pulmonary Rehabilitation/American College of Cardiology/American Heart Association

FUNDING SOURCE(S)

The Writing Committee had one face-to-face meeting at the outset of the writing project. Funding travel to the meeting was covered by the respective organizations (American Association of Cardiovascular and Pulmonary Rehabilitation [AACVPR], American College of Cardiology [ACC], and American Heart Association [AHA]). Conference calls were paid for by AACVPR. Other than in these cases, there were no other funding sources or reimbursements provided.

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) Representatives: Randal J. Thomas, MD, MS (Physician, Preventive Cardiologist, Mayo Clinic, Rochester, MN); Marjorie King, MD (Physician, Cardiologist, Helen Hayes Hospital, West Haverstraw, NY); Karen Lui, RN, C, MS (Nurse, GRQ Consulting Firm, Washington, D.C.); Neil Oldridge, PhD (Exercise Science/Physiology, University of Wisconsin-Milwaukee, Milwaukee, WI).

American College of Cardiology (ACC) Representatives: Ileana Piña, MD (Physician, Cardiologist, Case Western Reserve University, Cleveland, OH).

American Heart Association (AHA) Representatives: John Spertus, MD, MPH (Physician, Cardiologist, Mid America Heart Institute/University of Missouri-Kansas City, MO).

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Author Relationships with Industry -- American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR)/American College of Cardiology (ACC)/American Heart Association (AHA) Cardiac Rehabilitation/Secondary Prevention Performance Measures

Writing Committee Member	Research Grant	Speakers' Bureau/Honoraria/Expert Witness	Stock Ownership	Consultant/Advisory Board/Steering Committee
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Marjorie King, MD, FAACVPR, FACC	None	None	None	Healthways

Writing Committee Member	Research Grant	Speakers' Bureau/Honoraria/Expert Witness	Stock Ownership	Consultant/Advisory Board/Steering Committee
Karen Lui, RN, MS, FAACVPR	None	None	None	None
Neil Oldridge, PhD, FAACVPR	None	None	None	None
Ileana L. Piña, MD, FACC	Novartis	AstraZeneca	None	Food and Drug Administration (FDA)
	National Institutes of Health (NIH)	Novartis		
John Spertus, MD, MPH, FACC	Amgen	None	Health Outcomes Services	Amgen
	Atherotech		Outcomes Instruments	United Healthcare
	Roche Diagnostics			

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2007 Sep

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

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MEASURE AVAILABILITY

The individual measure, "Performance Measure B-3F: Individualized Assessment of the Diagnosis of Diabetes Mellitus or Impaired Fasting Glucose," is published in "AACVPR/ACC/AHA 2007 Performance Measures on Cardiac Rehabilitation for Referral to and Delivery of Cardiac Rehabilitation/Secondary Prevention Services." This article is available from the [American Association of Cardiovascular and Pulmonary Rehabilitation](#), the [American College of Cardiology](#), and the [American Heart Association](#) Web sites.

NQMC STATUS

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